

AMENDMENTS TO THE CLAIMS

Claims 1, 2 and 11 are currently amended.

1. (currently amended) Article [made of] comprising an electroless conversion coating in contact with magnesium or its alloys, [some or all of whose surface has an electroless conversion coating,] wherein the electroless conversion coating comprises MgO, Mn₂O₃ and MnO₂ plus at least one oxide from the group consisting of vanadium, molybdenum and tungsten.

2. (currently amended) Article with an electroless conversion coating, wherein the electroless conversion coating is prepared by a process comprising [passivating] contacting the article [using] having a surface consisting essentially of magnesium or an alloy thereof with an aqueous passivating electrolyte which comprises potassium permanganate and at least one alkali metal salt or ammonium salt of an anion from the group consisting of vanadate, molybdate and tungstate in the absence of an applied electric current.

3. (previously presented) Article according to claim 1, further comprising a polymer coating applied to the electroless conversion coating, said polymer coating comprising at least one polymerized or crosslinked alkoxysilane compound.

4. (previously presented) Article according to claim 3, wherein the alkoxysilane compound is of the general formula.



in which

X is an alkoxy, aryloxy or acyloxy group of 1 to 12 carbon atoms; R¹ and R², which are identical to or different from one another, are selected from the group consisting of

- amino, monoalkylamino or dialkylamino radicals;
- alkyl radicals;
- alkynyl radicals;
- alkenyl radicals;
- aryl radicals;
- epoxy radicals; or group X described above; and

a and b, which are identical to or different from one another, are 0, 1, 2 or 3, the sum of a and b not exceeding 3.

5. (previously presented) Article according to claim 4, wherein the alkoxysilane compound is selected from a tetraalkoxysilane, epoxyalkoxysilane or aminoalkoxysilane.

6. (original) Article according to claim 5, characterized in that the alkoxysilane compound is selected from the group consisting of tetraethoxysilane, 3-glycidyloxypropyltrimethoxysilane, 3-aminopropyltrimethoxysilane and 3-(aminoethylamino) propyltrimethoxysilane.

7. (previously presented) Article according to claim 3, wherein the polymer coating further comprises a titanium complex.

8. (previously presented) Article according to claim 7, wherein the titanium complex is a reaction product of an alkoxytitanium compound, a titanate ester or a titanium chelate and in particular is of the formula $Ti(OR)_4$ in which R is an alkyl radical of 1 to 6 carbon atoms.

9. (previously presented) Article according to claim 8, wherein the alkoxytitanium compound is tetraethoxytitanate $Ti(OC_2H_5)_4$.

10. (previously presented) Article according to claim 3, wherein the polymer coating further comprises at least one dye which is soluble in a polar solvent.

11. (currently amended) Process for [producing an electroless conversion] coating [on] an article [made of] with a magnesium or [its alloys] magnesium alloy surface, [characterized in that] comprising subjecting the article [is subjected] to electroless passivation using an aqueous passivating electrolyte which comprises potassium permanganate and at least one alkali metal salt or ammonium salt of an anion from the group consisting of vanadate, molybdate and tungstate in the absence of an applied electric current.

12. (original) Process according to claim 11, characterized in that the passivation is conducted within a pH range of the aqueous passivating electrolyte of from 7.0 to 8.0.

13. (previously presented) Process according to claim 11, characterized in that the passivation is conducted at a temperature of the aqueous passivating electrolyte of from 15 to 50 °C.

14. (previously presented) Process according to claim 11, characterized in that the passivation is conducted for a period of from 2 to 10 minutes.

15. (original) Process according to claim 11, characterized in that the concentration of potassium permanganate in the aqueous passivating electrolyte is from 1 to 10 g/l.

16. (previously presented) Process according to claim 11, characterized in that the concentration of the alkali metal salt or ammonium salt from the group consisting of vanadate, molybdate and tungstate in the aqueous passivating electrolyte is from 1 to 10 g/l.

17. (previously presented) Process according to claim 11, further comprising applying a paint or other surface coating material to the electroless conversion coating.

18. (new) Article according to claim 4, wherein the alkoxysilane compound is of the general formula.



wherein

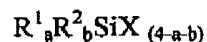
X is an alkoxy, aryloxy or acyloxy group of 1 to 4 carbon atoms;

R¹ and R², which are identical to or different from one another, are selected from the group consisting of

- amino, monoalkylamino or dialkylamino radicals,
- alkyl radicals of 1 to 6 carbon atoms,
- alkynyl radicals of 2 to 6 carbon atoms,
- alkenyl radicals of 2 to 6 carbon atoms,

- aryl radicals of 6 to 10 carbon atoms, and
- epoxy radicals of 3 to 16 carbon atoms.

19. (new) Article according to claim 18, wherein the alkoxysilane compound is of the general formula



wherein

X is selected from the group consisting of methoxy, ethoxy, n-propoxy, i-propoxy, butoxy, phenoxy, acetoxy and propionyloxy groups

R¹ and R², which are identical to or different from one another, are selected from the group consisting of

- amino, monoalkylamino or dialkylamino radicals;
- alkyl radicals selected from methyl, ethyl, n-propyl, isopropyl, n-butyl, s-butyl, t-butyl, pentyl, hexyl or cyclohexyl radicals;
- alkynyl radicals selected from acetylenyl or propargyl radicals;
- alkenyl radicals selected from vinyl, 1-propenyl, 2-propenyl or butenyl radicals;
- aryl radicals selected from phenyl or naphthyl radicals; and
- epoxy radicals selected from glycidyl, glycidyl ether, glycidyl ester or glycidyoxyalkyl radicals.